

ABSTRACT

A point diffraction interference measuring method comprises forming a substantially ideal spherical wave by using a point light source-generating unit 101, 102, allowing a light flux composed of the spherical wave to pass through a test sample 109, thereafter dividing the light flux into two light fluxes by using an optical path-dividing element 105, allowing one light flux of the divided light fluxes to pass through a pinhole 129 to convert the one light flux into a reference light beam which is a substantially ideal spherical wave, and detecting interference fringes generated by causing interference between the reference light beam and a measuring light beam which is the other light flux of the divided light fluxes. The wavefront aberration of the test sample can be measured by observing the interference fringes without being affected by the disturbance which would be otherwise caused by any system vibration or the like.